

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 2 TO ORDER NO. 93-82
MODIFICATION TO THE BUENA SANITATION DISTRICT
SHADOWRIDGE WATER RECLAMATION FACILITY
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds that:

1. On September 20, 1993, this Regional Board adopted Order No. 93-82, *Waste Discharge Requirements for Buena Sanitation District Shadowridge Water Reclamation Facility, San Diego County*, establishing requirements for reuse of up to 1.16 million gallons per day (mgd) of tertiary treated wastewater.
2. Provision C.16 of Order No. 93-82 specifies a time schedule by which the Buena Sanitation District should be in full compliance with the Basin Plan objective of 0.05 milligrams per liter (mg/l) for manganese by March 20, 1997.
3. Discharge Specification B.1 of Order No. 93-82, as amended, establishes an interim 12-month average effluent limitation for manganese of 0.07 milligrams per liter (mg/l) until March 20, 1997. After March 20, 1997, the 12-month average effluent limitation for manganese will be 0.05 mg/l.
4. By letter dated June 26, 1996, Wilson Engineering on behalf of the Buena Sanitation District, requested a relaxation of the manganese limit specified by Discharge Specification B.1.
5. The change to the manganese effluent limit provided by this Addendum will not impact ground water quality and is thereby consistent with the Water Quality Control Plan, San Diego Region (9).
6. This project is an ongoing project and as such is exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Administrative Code, Chapter 3, Article 18, Section 15261.
7. The Regional Board has notified all known interested parties of its intent to modify Order No. 93-82 to reflect a relaxation of the manganese effluent limit.
8. The Regional Board in a public hearing heard and considered all comments pertaining to the modification of Order No. 93-82.

Add. No. 2 to Order No. 93-82

IT IS HEREBY ORDER THAT ORDER NO. 93-82 BE AMENDED AS FOLLOWS:

1. The manganese effluent limit required under Discharge Specification B.1 is superseded by the following:

CONSTITUENT	UNIT	12-MONTH AVERAGE	30-DAY AVERAGE	DAILY MAXIMUM
MANGANESE	MG/L	0.07	---	---

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of Addendum No. 2 to Order No. 93-82 adopted by the California Regional Water Quality Control Board, San Diego Region, on March 12, 1997.



JOHN H. ROBERTUS
Executive Officer

LAW
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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO. 1 TO ORDER NO. 93-82
FOR
BUENA SANITATION DISTRICT
SHADOWRIDGE WATER RECLAMATION FACILITY
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds that:

1. On September 20, 1993, this Regional Board adopted Order No. 93-82, "Waste Discharge Requirements for Buena Sanitation District, Shadowridge Water Reclamation Facility. Order No. 93-82 established requirements for the discharge of up to 1.0 million gallons per day (MGD) of treated wastewater from the Shadowridge Water Reclamation Facility to land disposal facilities.
2. Provision C.16 of Order No. 93-82 specifies a time schedule by which the Buena Sanitation District (hereinafter discharger) should be in full compliance with the Basin Plan objective 0.05 mg/l for manganese by September 20, 1995.
3. Buena Sanitation District submitted a Report of Waste Discharge dated October 7, 1994, requesting an extension of the expiration date for the interim manganese limit of 0.07 mg/l from September 20, 1995 as currently required under Order No. 93-82 to March 20, 1997. The 2 year time extension would allow time to do additional studies and experiment with alternative treatment methods at the Shadowridge Water Reclamation Plant to reduce the effluent manganese levels. The discharger proposes to conduct a two-year study for developing a plant operating regime for manganese removal from the effluent.
4. On December 8, 1994, after due notice to the discharger and all interested parties, the Regional Board conducted a hearing at which representatives of Buena Sanitation District appeared and evidence was discussed concerning the issuance of this time schedule order.
5. This project is an ongoing project and as such is exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Administrative Code, Chapter 3, Article 18, Section 15261.

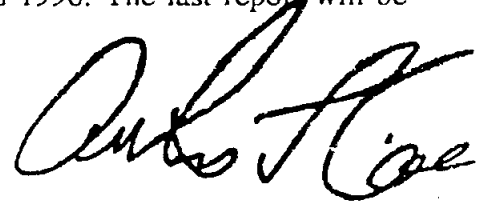
Addendum No. 1 to Order No. 93-82

IT IS HEREBY ORDERED, That in accordance with California Water Code, Section 13300, Buena Sanitation District shall comply with the following:

1. Task 5 of Provision C.16 of Order No. 93-82 is modified as follows:

TASK	COMPLETION DATE
5. Complete work necessary to achieve compliance with the Basin Plan Objective of 0.05 mg/l for Manganese.	3-20-97

2. The Buena Sanitation District shall submit quarterly status reports to the Regional Board. The status report should discuss the progress of all studies and include the results of all field tests and data analysis. The status reports will be due January 30th, April 30th, July 30th, and October 30th, for 1995 and 1996. The last report will be due on January 30th 1997.



ARTHUR L. COE
Executive Officer

Date: December 8, 1994
LAW

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 93-82

BUENA SANITATION DISTRICT
SHADOWRIDGE WATER RECLAMATION PLANT
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region, (hereinafter Regional Board) finds that:

1. On November 26, 1979, this Regional Board adopted Order No. 79-76, "Waste Discharge Requirements for the County of San Diego, Buena Sanitation District in the City of Vista, California." Order No. 79-76 and Addenda thereto established requirements for the discharge of up to 1.0 million gallons per day (MGD) of treated domestic sewage from the Shadowridge Reclamation Plant to land disposal facilities.
2. On March 9, 1987, this Regional Board adopted Order No. 87-32, "Waste Discharge Requirements for the County of San Diego, Buena Sanitation District in the City of Vista, California." Addendum No. 1 to Order No. 87-32 authorizes the Buena Sanitation District to supply reclaimed water to the Carlsbad Municipal Water District from the Shadowridge Water Reclamation Plant for distribution anywhere in the City of Carlsbad where the groundwater quality objectives do not apply or are 3,500 milligrams per liter (mg/l) for total dissolved solids (TDS).
3. On May 20, 1991, this Regional Board adopted Order No. 91-60, "Water Reclamation Requirements for the purveyance of reclaimed water by the Carlsbad Municipal Water District, San Diego County." Order No. 91-60 authorizes the Carlsbad Municipal Water District to purvey water from the Shadowridge WRP, the Meadowlark WRP, and the Gafner WRP to the portions of the City of Carlsbad described in the Findings above.
4. As a part of the FY 1992/93 Waste Discharge Order Update Program, Order No. 87-32 has been reviewed by the Regional Board staff in accordance with criteria established in the Administrative Procedures Manual adopted by the State Water Resources Control Board. As a result of this review, modifications have been incorporated into this Order. This Order, which supersedes Order No. 87-32, consolidates and makes changes to the Findings, Requirements, and Monitoring and Reporting Program of Order No. 87-32.

5. The existing Shadowridge facilities are located in the NE1/4 of the SW1/4 of Section 6, T12S, R3W, SBB&M.
6. The existing treatment facilities consist of screening, grit removal facilities, fixed film biological treatment, final sedimentation, coagulation, filtration, demineralization, and disinfection. In addition, there is a storage reservoir with the capacity of approximately 280 acre-feet.
7. The Buena Sanitation District has installed a failsafe effluent disposal line from the Shadowridge Reclamation Plant to the Encina Ocean Outfall. The failsafe line is used during periods when irrigation can not be practiced.
8. The discharge through the Encina Ocean Outfall is regulated by the NPDES permit issued to the Encina Joint Powers.
9. The sludge, grit and screenings from the Shadowridge Water Reclamation Plant is conveyed by existing pipelines to the Encina Water Pollution Control Facility for processing.
10. On April 3, 1980, the State Board adopted Order No. WQ 80-7, **In the Matter of the Petition of the County of San Diego for Review of Inaction of San Diego Regional Water Quality Control Board Regarding Implementation of Water Reclamation Goals.**

State Board Order No. WQ 80-7 directed the Regional Board to amend Order No. 79-76 to relax the effluent total dissolved solids limitation from 400 mg/l to 550 mg/l. Order NO. WQ 80-7 provides that, in setting waste discharge requirements for wastewater reclamation projects, compliance with water quality objectives is of primary importance. In the absence of a detailed technical analysis of the entire basin, Order No. WQ 80-7 directs the Regional Board to exercise sound and reasoned judgement in evaluating wastewater reclamation projects.

11. On April 22, 1992, the Buena Sanitation District (hereinafter discharger) submitted a report of waste discharge (RWD) for the Shadowridge Water Reclamation Plant. The RWD proposes to increase the flow from 1.0 MGD to 1.16 MGD of Title 22 treated effluent and to relax the discharge specifications to a level that would enable the discharger to eliminate the demineralization process. After additional information was submitted by the discharger on July 1, 1993, the RWD was considered complete. The RWD consists the following:
 - A report titled "Shadowridge Water Reclamation Plant Expansion and Modification Project" dated November, 1990, prepared by John S. Murk Engineers, Inc.

- A letter from the Buena Sanitation District dated December 31, 1992.
 - A report titled "Shadowridge Water Reclamation Plant Waste Discharge Requirements" dated March 1993, prepared by Wilson Engineering.
 - A Mitigated Negative Declaration dated July 1, 1993.
 - A State of California Form 200, "Application For Facility Permit/Waste Discharge."
12. The discharger reports that starting July 1, 1993, the Encina Wastewater Authority has been contracted to operate the Shadowridge Water Reclamation Plant.
13. The Wilson Engineering report, noted in above Finding No. 11, states that the quality of potable water supplied by Vista Irrigation District is as follows:

CONSTITUENT	CONCENTRATION (mg/l)
Total Dissolved Solids	600
Chloride	83
Sulfate	233
Boron	0.08
Manganese	0.003
MBAS	Not Detected
Fluoride	0.31

14. The Wilson Engineering report further states that the total dissolved solids (TDS) concentration for the Los Monos Hydrologic Subarea has changed as follows:

WELL OWNER	TOTAL DISSOLVED SOLIDS (mg/l)		
	1979	1987	1992
Union Rescue Mission	1,848	1,540	2,000
Dawson (A)	---	812	888
Dawson (B)	1,120	---	1,060
Barlow (Residence)	---	862	1,470
Gribble	---	1,860	1,590
Barlow (Ranch)	1,858	2,020	3,400

Tarbet	1,276	1,600	1,940
Rancho Carlsbad (Pond)	1,340	1,630	1,430

Based on the limited groundwater monitoring, the average TDS concentration in the groundwater for the Los Monos Hydrologic Subarea (4.31) is above the basin plan objectives. In addition, the average TDS concentration has increased without the use of reclaimed water in the basin; therefore, an increase in TDS concentration in the basin is not attributable to the use of reclaimed water.

15. The Wilson Engineering report stated that potable water distribution facilities are either currently or are planned to be in close proximity to all downstream groundwater users.
16. The existing disposal areas are located in the Carlsbad (4.00) Hydrologic Unit (HU) and in the following Hydrologic Areas (HA) and Subarea (HSA):
 - a. Buena Vista Creek (4.20) HA, El Salto (4.21) HSA within the City of Carlsbad;
 - b. Agua Hedionda (4.30) HA, Los Monos (4.31) HSA and Buena (4.32) HSA;
 - c. Encinas (4.40) HA within the City of Carlsbad;
 - d. San Marcos (4.50) HA, Batiquitos (4.51) HSA within the City of Carlsbad; and
 - e. San Marcos (4.50) HA, Richland (4.52) HSA.
17. The "Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan)", was adopted by this Regional Board on March 17, 1975 and subsequently approved by the State Water Resources Control Board (State Board). Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board.
18. The Basin Plan established the following beneficial uses of surface water and ground water in the El Salto (4.21) HSA, the Los Monos (4.31) HSA, the Buena (4.32) HSA, the Encinas (4.40) HA, the Batiquitos (4.51) HSA, and the Richland (4.52) HSA:

Beneficial Uses Identified in Basin Plan													
Beneficial Use		Surface Water						Groundwater ¹					
		4.21	4.31	4.32	4.40	4.51	4.52	4.21	4.31	4.32	4.40	4.51 ⁴	4.52 ⁵
MUN	Municipal and Domestic Supply		X	X				X	O	X		O	X
AGR	Agriculture Supply	X	X	X		X	X	O	X ² O ³	X		O	X
IND	Industrial Service Supply	X	X	X				O	O	X		O	X
PROC	Industrial Process Supply												
GWR	Groundwater Recharge												
FRSH	Freshwater Replenishment												
POW	Hydropower Generation												
REC-1	Water Contact Recreation	X	X	X		X	X						
REC-2	Non-Contact Water Recreation	X	X	X	X	X	X						
WARM	Warm Fresh-Water Habitat	X				X	X						
COLD	Cold Fresh-Water Habitat												
WILD	Wildlife Habitat	X	X	X	X	X	X						
RARE	Preservation of Rare & Endangered Species	X	X	X	X	X	X						
SPWN	Fish Spawning												

Notes: O Potential beneficial uses.
X Existing beneficial uses.

- 1 These beneficial uses do not apply westerly of the easterly boundary of the right-of-way of Interstate Highway 5. The beneficial uses for the remainder of the hydrologic area are as shown.
- 2 These beneficial use designations apply to the portion of subarea 4.31 tributary to Agua Hedionda Creek downstream from the El Camino Real crossing, except lands tributary to Marcario Canyon (located directly southerly of Evans Point), land directly south of Agua Hedionda Lagoon, and areas west of Interstate Highway 5.
- 3 These beneficial use designations apply to the portion of subarea 4.31 bounded on the west by the easterly boundary of the Interstate Highway 5 right-of-way; on the east by the easterly boundary of El Camino Real; and on the north by a line extending along the southerly edge of Agua Hedionda Lagoon to the easterly edge of the Agua Hedionda Lagoon, thence in an easterly direction to Evans Point, thence easterly to El Camino Real along the ridge lines separating Letterbox Canyon and the area draining to Marcario Canyon.
- 4 These beneficial use designations apply to the portion of subarea 4.51 bounded on the south by the north shore of Batiquitos Lagoon, on the west by the easterly boundary of the Interstate Highway 5 right-of-way and on the east by the easterly boundary of El Camino Real.
- 5 The beneficial uses do not apply to hydrologic subarea 4.51 and hydrologic subarea 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek and to Encinitas Creek. The beneficial uses for the remainder of the subarea are as shown.

19. The Basin Plan established the following water quality objectives for the El Salto (4.21) HSA, the Los Monos (4.31) HSA, the Buena (4.32) HSA, the Encinas (4.40) HA, the Batiquitos (4.51) HSA, and the Richland (4.52) HSA:

Basin Plan Water Quality Objectives				
CONSTITUENT	Concentration not to be exceeded <u>more than 10 percent of the time</u> during any one year period (mg/l or as noted)			
	Inland Surface Water	Groundwater		
	4.21, 4.31, 4.32, 4.40, 4.51, 4.52	4.21 ¹ , 4.31 ^{1,2} , 4.40 ¹ , 4.51 ^{1,3,4}	4.31 ¹ , 4.32	4.52 ^{1,3}
Total Dissolved Solids	500	3500 ₅	1200	1000
Chloride	250	800 ₅	500	400
Percent Sodium	60 %	60 %	60 %	60 %
Sulfate	250	500	500	500
Nitrate (as NO ₃)	----	45 ₅	10	10
Nitrogen and Phosphorus	*	5	----	----
Iron	0.3	0.3	0.3	0.3
Manganese	0.05	0.05	0.05	0.05
Methylene Blue Active Substances	0.5	0.5 ₅	0.5	0.5
Boron	0.5	2.0	0.5	0.5
Odor	None	None	None	None
Turbidity	20 NTU	5 NTU	5 NTU	5 NTU
Color	20 Units	15 Units	15 Units	15 Units
Fluoride	1.0	1.0	1.0	1.0

Note: mg/l = milligrams per liter

NTU = Nephelometric turbidity units

* Concentrations of nitrogen and phosphorus, by themselves or in combination with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total phosphorus (P) concentrations shall not exceed 0.05 mg/l in any stream at the point where it enters any reservoir or lake, nor 0.025 mg/l in any reservoir or lake. A desired goal in flowing waters appears to be 0.1 mg/l total P. These values are not to be exceeded more than 10% of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds, however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

- 1 The water quality objectives do not apply westerly of the easterly boundary of Interstate Highway 5. The objectives for the remainder of the hydrologic area (subarea) are as shown.
- 2 The water quality objectives do not apply to hydrologic subareas 4.51 and 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek and Encinitas Creek. The objectives for the remainder of the hydrologic area are as shown.
- 3 The water quality objectives do not apply to hydrologic subareas 4.51 and 4.52 between Highway 78 and El Camino Real and to all lands which drain to Moonlight Creek and Encinitas Creek. The objectives for the remainder of the hydrologic area are as shown.
- 4 No significant amount of ground water in this unit.
- 5 This only applies to 4.40
Detailed salt balance studies are recommended for this area to determine limiting mineral concentration levels for discharge. On the basis of existing data, the tabulated objectives would probably be maintained in most areas. Upon completion of the salt balance studies, significant water quality objective revisions may be necessary. In the interim period of time, projects of ground water recharge with water quality inferior to the tabulated numerical values may be permitted following individual review and approval by the Regional Board if such projects do not degrade existing ground water quality in the aquifers affected by the recharge.

20. The Basin Plan contains the following prohibitions which are applicable to the discharge:

"Discharge of treated or untreated sewage or industrial wastewater, exclusive of cooling water or other waters which are chemically unchanged, to a watercourse, is prohibited except in cases where the water quality of said discharge complies with the receiving body water quality objectives."

"Discharging of treated or untreated sewage or industrial wastes in such manner or volume as to cause sustained surface flow or ponding on lands not owned or under control of the discharger is prohibited except in cases defined in the previous paragraph and in cases in which the responsibility for all downstream adverse effects is accepted by the discharger."

"The dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste directly into inland waters or watercourses or adjacent to the watercourses in any manner which may permit its being washed into the watercourse is prohibited."

"Dumping or deposition of oil, garbage, trash or other solid municipal, industrial or agricultural waste into natural or excavated sites below historic water levels or deposition of soluble industrial wastes at any site is prohibited, unless such site has been specifically approved by the Regional Board for that purpose."

21. On June 1, 1993, the City of Vista adopted a Mitigated Negative Declaration finding that the expansion of the Shadowridge WRP from 1.0 MGD to 1.16 MGD and the elimination of demineralization will not have a significant impact on the environment.
22. Regional Board Resolution No. 90-61, **A Resolution Amending Resolution No. 90-40, A Region-wide Groundwater Amendment to the Comprehensive Water Quality Control Plan for the San Diego Region**, indicates that for areas downgradient of municipal supply reservoirs, effluent limitations for reclaimed water shall be at levels that are not less than constituent concentrations of water supply plus a typical incremental increase resulting from domestic water use, but not more than the **"Comprehensive Water Quality Control Plan Report, San Diego Basin (9)"** (Basin Plan) ground water quality objectives.
23. This Order relaxes the discharge limitations for the TDS, Chloride, and Sulfate to levels consistent with Regional Board Resolution No. 90-61. The discharge of reclaimed water complying with the discharge specifications contained in this order will not cause adverse impacts to the

beneficial use of groundwater in the mentioned hydrologic subareas.

24. The discharge of reclaimed water to the areas authorized by this Order is in conformance with Resolution No. 68-16, **"Statement of Policy with Respect to Maintaining the High Quality of Waters in California."** The wastewater reclamation and reuse projects that will occur in the areas authorized by this Order under the terms and conditions of this Order will:
 - a. Have maximum benefit to the people of the State, because in the absence of reclaimed wastewater, imported potable water would be used for irrigation of the reclaimed water use areas described in this Order;
 - b. Not unreasonably effect the beneficial uses of ground water in the underlying basins; and
 - c. Not cause the ground water objectives of the El Salto (4.21) HSA, the Buena (4.32) HSA, the Encinas (4.40) HA, the Batiquitos (4.51) HSA, and the Richland (4.52) HSA to be exceeded.
25. This Order prescribes waste discharge requirements and reclamation requirements governing the production and use of reclaimed water, which the Regional Board has determined are necessary to protect the public health, safety and welfare pursuant to California Water Code, Division 7, Chapter 7, Sections 13500-13550 ("Water Reclamation Law"). This Order, which applies to the producer of reclaimed water, requires that the producer of the reclaimed water establish and enforce rules and regulations which apply to users, including purveyors, of the reclaimed water.
26. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
 - (a) Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;
 - (b) Other waste discharges;
 - (c) The need to prevent nuisance;
 - (d) Past, present, and probable future beneficial uses of the hydrologic subunits under consideration;
 - (e) Environmental characteristics of the hydrologic subunits under consideration;
 - (f) Water quality conditions that could reasonably be

achieved through the coordinated control of all factors which affect water quality in the area;

- (g) Economic considerations;
 - (h) The need for additional housing within the region; and
 - (i) The need to develop and use recycled water.
27. The Regional Board has considered all water resource related environmental factors associated with the proposed discharge of waste.
 28. The Regional Board has notified the Buena Sanitation District and all known interested parties of the intent to prescribe waste discharge requirements for the proposed discharge.
 29. The Regional Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Buena Sanitation District, hereinafter discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following requirements for the Shadowridge Water Reclamation Plant:

A. PROHIBITIONS

1. Discharges of wastes to lands which have not been specifically described in the report of waste discharge and for which valid waste discharge requirements are not in force are prohibited.
2. The discharge of any radiological, chemical or biological warfare agent, or high-level radiological waste is prohibited.
3. Storage, use and/or disposal of wastes in a manner that would result in ponding or surfacing of wastes on lands beyond the disposal area, as described in the findings of this Order, is prohibited.
4. The discharge of wastewater shall not:
 - (a) Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basins;
 - (b) Cause the occurrence of objectionable tastes and odors in waters pumped from the basins;
 - (c) Cause waters pumped from the basins to foam;
 - (d) Cause the presence of toxic materials in waters pumped from the basins;
 - (e) Cause the pH of waters pumped from the basins to fall below 6.0 or rise above 9.0;
 - (f) Cause this Regional Board's objectives for the ground or surface waters of the El Salto (4.21) HSA, the Los Monos (4.31) HSA, the Buena (4.32) HSA, the Encinas (4.40) HA, the Batiquitos (4.51) HSA, and the Richland (4.52) HSA as established in the Basin Plan to be exceeded;
 - (g) Cause odors, septicity, mosquitos or other vectors, weed growth or other nuisance conditions in any inland watercourse;
 - (h) Cause a surface flow recognizable as sewage in any inland watercourse; or

- (i) Cause a pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters of the El Salto (4.21) HSA, the Los Monos (4.31) HSA, the Buena (4.32) HSA, the Encinas (4.40) HA, the Batiquitos (4.51) HSA, and the Richland (4.52) HSA as established in the Basin Plan.
- 5. A daily flow from the Shadowridge Water Reclamation Plant in excess of 1.16 million gallons is prohibited unless the discharger obtains revised waste discharge requirements for the proposed increased flow.
- 6. Odors, vectors, and other nuisances of sewage or sewage sludge origin beyond the limits of the treatment plant site or disposal area are prohibited.
- 7. The bypassing of wastewater to be used for landscape irrigation which does not meet the discharge specifications of this Order is prohibited.
- 8. The discharge of waste in a manner other than as described in the Findings of this Order is prohibited unless the discharger obtains revised waste discharge requirements that provide for the proposed changes.
- 9. Land disposal of wastewater by irrigation in areas for which water reclamation requirements have not been issued is prohibited. Disposal of wastewater to land other than as authorized by waste discharge requirements issued by this Regional Board is prohibited. Disposal of wastewater to waters of the United States other than as authorized by an NPDES permit issued by this Regional Board is prohibited.

B. DISCHARGE SPECIFICATIONS

1. The discharge for landscape irrigation and other land disposal projects of a tertiary treated effluent containing pollutants in excess of the following effluent limitations is prohibited:

Effluent Limitations				
Constituent	unit	12-month Average ¹	30-day Average ²	Daily Maximum ³
Biochemical Oxygen Demand (BOD ₅ @ 20 °C)	mg/l		30	45
Total Suspended Solids	mg/l		30	45
PH		Within the limits of 6.0 to 9.0 at all times		
Total Dissolved Solids	mg/l			1,200
Chloride	mg/l	300		350
Sulfate	mg/l	350		400
Manganese	mg/l	0.07 ⁴		
Iron	mg/l	0.3		0.4
Boron	mg/l	0.5		0.6
Fluoride	mg/l	1.0		
Coliform	MPN/100ml		**	**
Turbidity	NTU		***	***

- 1 The 12-month average effluent limitation shall apply to the arithmetic mean of the results of monthly averages of all samples collected during the previous 12 months.
 - 2 The 30-day average effluent limitation shall apply to the arithmetic mean of the results of all samples collected during any 30 consecutive calendar day period.
 - 3 The daily maximum effluent limitation shall apply to the results of a single composite or grab sample.
 - 4 This is an interim limit, and will expire on September 20, 1995. After September 20, 1995, the Manganese discharge limitation will be 0.05 mg/l, unless the discharger obtains revised discharge limitations.
- * The 12-month average concentration of the discharge shall not exceed the imported water supply concentration plus an incremental increase equal to the typical incremental increase added to the water supply which has been used for domestic purposes.
- ** The median number of coliform organisms shall not exceed 2.2 per 100 milliliters and the number of coliform organisms shall not exceed 23 per 100 milliliters in more than one sample within any 30-day period.
- *** Not to exceed an average operating turbidity of 2 turbidity units. Not to exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

2. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

3. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.
4. Collected screenings, sludge, other solids removed from liquid wastes, and filter backwash shall be disposed in a manner approved by the Executive Officer. Before sludge is disposed of by means other than discharge to the Encina Water Pollution Control Facility or a landfill regulated under waste discharge requirements, the discharger shall submit written notification to the Executive Officer of the proposed disposal method. Such disposal shall not be initiated until approved by the Executive Officer.
5. Effluent used for irrigation purposes shall be treated to the most restricted level in conformance with all applicable provisions of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria) for a landscaping irrigation (currently Section 60313 (b) and 60320.5).
6. Effluent storage facilities shall be designed, constructed, operated, and maintained so as to prevent surfacing of wastes on property not owned or controlled by the discharger. Surface runoff of any wastes which surface on property owned or controlled by the discharger onto property not owned or controlled by the discharger shall be prevented.

C. PROVISIONS

1. These WDRs hereby supersede Order No. 87-32, **Waste Discharge Requirements for the Buena Sanitation District, Shadowridge Water Reclamation Plant, San Diego County.**
2. Neither the treatment nor the discharge of waste shall create a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
3. The discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a report of waste discharge in application for new or revised waste discharge requirements.
4. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility is failed, reduced, or lost.
5. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
6. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order.

7. This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - (a) Violation of any terms or conditions of this Order;
 - (b) Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

8. This Order is not transferrable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement E.3.
9. This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state or local laws, nor create a vested right for the discharger to continue the waste discharge.
10. The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - (d) Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.
11. The discharger's wastewater treatment facilities shall be supervised and operated by persons possessing certificates of appropriate grade pursuant to Chapter 3, Subchapter 14, Title 23 of the California Code of Regulations.
 12. A copy of this Order shall be maintained at the Shadowridge Water Reclamation Plant and shall be available to operating personnel at all times.
 13. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
 14. The potable water supply shall not be used to supplement the reclaimed water supply except through an approved air gap. In other areas where the potable water supply is piped to premises where sewage is pumped, treated or reclaimed (e.g., sewage treatment plants or pumping stations, golf course, etc.) the potable water supply shall be protected at the property line in accordance with the State Department of Health Services' **Regulations Relating to Cross-Connections**.
 15. All waste water treatment and disposal facilities shall be completely constructed and shall have adequate capacity for the full design flow of 1.16 MGD. A report from the design engineer certifying the adequacy of each component of the treatment and disposal facilities shall be submitted by the discharger prior to the increase in effluent flow from 1.0 MGD to 1.16 MGD. The certification report shall contain a requirement-by-requirement analysis based on acceptable engineering practices, of how the process and physical designs of the facilities will ensure compliance with the waste discharge requirements. The design engineer shall affix his signature and engineering license number to the certification report and should submit it prior to construction of the facilities. The increase

in effluent flow from 1.0 MGD to 1.16 MGD shall not be initiated until:

- a. The certification report is received by the Regional Board Executive Officer;
 - b. The Regional Board Executive Officer has been notified of the completion of facilities by the discharger;
 - c. An inspection of the facilities has been made by staff of the Regional Board; and
 - d. The Regional Board Executive Officer has notified the discharger by letter that the irrigation can be initiated.
16. The discharger shall complete the following tasks in accordance with the following time schedule:

TASKS	COMPLETION DATE
1. Begin development of a plan for bringing the Manganese discharge limitation into compliance with the Basin Plan Objectives of 0.05 mg/l.	3/20/94
2. Complete the plan initiated in Task 1 in a manner acceptable to the Executive Officer.	6/20/94
3. Begin work necessary to achieve compliance with the Basin Plan Objectives.	9/20/94
4. Progress Report	9/20/94
5. Complete work necessary to achieve compliance with the Basin Plan Objectives.	9/20/95

The discharger shall submit to the Regional Board on or before each completion date a report of compliance or noncompliance with the specific task. If noncompliance is being reported, the reasons for such noncompliance and an alternative compliance schedule shall be stated. The Regional Board shall be notified by letter upon return to compliance with the time schedule.

D. RECLAIMED WATER USE PROVISIONS

1. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties **other** than the Carlsbad Municipal Water District or the Vista Irrigation District in the areas authorized under these waste discharge requirements, the discharger/producer shall have **Rules and Regulations for Reclaimed Water Users** governing the design and construction of reclaimed water use facilities and the use of reclaimed water. The Rules and Regulations shall be reviewed and updated if necessary by the discharger/producer when a new Order or Addendum is adopted by the Regional Board, and shall, at a minimum, contain the following provisions:
 - a. Provisions implementing Title 22, Division 4, Chapter 3, **Wastewater Reclamation Criteria**, and Title 17, Division 1, Chapter 5, Group 4, Articles 1 & 2, of the California Code of Regulations;
 - b. Provisions implementing the State Department of Health Services (DOHS) **Guidelines For Use of Reclaimed Water and Guidelines for Use of Reclaimed Water for Construction Purposes** and measures that are deemed necessary for protection of public health, such as the American Water Works Association (AWWA) California/Nevada Section, **Guidelines for the Distribution of Non-Potable Water** or alternate measures, acceptable to DOHS, providing equivalent protection of public health;
 - c. Provisions authorizing the Regional Board, the discharger/producer, or an authorized representative of these parties, upon presentation of proper credentials, to inspect the facilities of any reclaimed water user to ascertain whether the user is complying with the discharger/producer's rules and regulations;
 - d. Provision for written notification, in a timely manner, to the discharger/producer by the reclaimed water user of any material change or proposed change in the character of the use of reclaimed water;
 - e. Provision for submission of a preconstruction report to the discharger/producer by the reclaimed water user in order to enable the discharger/producer to determine whether the user will be in compliance with the discharger/producer's rules and regulations;

- f. Provision requiring reclaimed water users to designate a reclaimed water supervisor responsible for the reclaimed water system at each use area under the user's control. Reclaimed water supervisors should be responsible for the installation, operation, and maintenance of the irrigation system, enforcement of the discharger/producer's reclaimed water user rules and regulations, prevention of potential hazards, and maintenance of the reclaimed water distribution system plans in "as built" form;
- g. Provision authorizing the discharger/producer to cease supplying reclaimed water to any person who uses, transports, or stores such water in violation of the discharger/producer's rules and regulations;
- h. Provision requiring notification and concurrence of the State Department of Health Services and the San Diego County Department of Health Services, Environmental Health Services for new reclaimed water users. The notification of Environmental Health Services shall include a site distribution plan for new and retrofit facilities and a cross-connection control inspection plan for sites containing both potable and reclaimed water distribution lines;
- i. Provision requiring all windblown spray and surface runoff of reclaimed water applied for irrigation onto property not owned or controlled by the discharger or reclaimed water user shall be prevented by implementation of best management practices;
- j. Provision requiring all reclaimed water storage facilities owned and/or operated by reclaimed water users to be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency storm, 24 hour storm;
- k. Provision requiring all reclaimed water storage facilities owned and/or operated by reclaimed water users to be protected against 100 - year frequency peak stream flows as defined by the San Diego County flood control agency;
- l. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against any reclaimed water user who discharges reclaimed water in violation

of any applicable discharge prohibitions prescribed by the Regional Board or in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050; and

- m. Provision for notification to reclaimed water users that the Regional Board may initiate enforcement action against the discharger/producer, which may result in the termination of the reclaimed water supply, if any person uses, transports, or stores such water in violation of the discharger/producer's rules and regulations or in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code Section 13050.

The revised rules and regulations shall be subject to the approval of the Regional Board Executive Officer; the State Department of Health Services; and the San Diego County Department of Health Services, Environmental Health Services. The revised rules and regulations or a letter certifying that the discharger/producer's rules and regulations contain the updated provisions in the Order, shall be submitted to the Regional Board within 90 days of adoption of this Order by the Regional Board.

- 2. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties other than the Carlsbad Municipal Water District or the Vista Irrigation District, the discharger/producer shall implement and enforce the approved rules and regulations for reclaimed water users. Use of reclaimed water by the discharger/producer shall be consistent with provisions a. through m. in item D.1 above. In addition, the discharger/producer shall submit an annual report certifying that the users have implemented the Rules and Regulations established by the discharger.
- 3. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties other than the Carlsbad Municipal Water District or the Vista Irrigation District, the discharger/producer shall within 90 days of the adoption of this order, develop and submit to the Regional Board a program of Best Management Practices (BMP) for the reclaimed water users governing the irrigation practices, management and maintenance to avoid runoff, ponding, and overspray. The discharger/producer shall oversee that the reclaimed water users have implemented the BMP upon approval of the BMP program by the Regional Board

Executive Officer.

4. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties other than the Carlsbad Municipal Water District or the Vista Irrigation District, the discharger/producer shall, within 90 days of the adoption of this Order, develop and submit to the Regional Board a program to conduct compliance inspections of reclaimed water reuse sites to determine the status of compliance with the approved rules and regulations for reclaimed water users. The discharger/producer shall implement the inspection program upon its approval by the Regional Board Executive Officer.
5. Reclaimed water shall not be supplied to parties who use, transport, or store such water in a manner which causes a pollution, contamination or nuisance, as defined by Section 13050 of the California Water Code.
6. Prior to using reclaimed water or supplying reclaimed water for use by other parties in any manner or in any area other than as described in the findings of this Order, the discharger/producer shall obtain proper authorization from this Regional Board.

E. REPORTING REQUIREMENTS

1. The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:
 - (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
 - (b) Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste.)
 - (c) Change in the disposal area from that described in the findings of this Order.
 - (d) Increase in flow beyond that specified in this Order.
 - (e) Other circumstances which result in a material change in character, amount, or location of the waste discharge.
 - (f) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.
2. The discharger shall furnish to the Executive Officer of this Regional Board, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer, upon request, copies of records required to be kept by this Order.
3. The discharger must notify the Executive Officer, in writing at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage to a new discharger. The notice must include a written agreement between the existing and new discharger containing a specific date for the transfer of this Order's responsibility and coverage between the current discharger and the new discharger. This agreement shall include an acknowledgement that the existing discharger is liable for violations up to the transfer date and that the new discharger is liable from the transfer date on.

4. The discharger shall comply with attached Monitoring and Reporting Program No. 93-82, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 93-82.
5. If a need for a discharge bypass is known in advance, the discharger shall submit prior notice and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass.
6. Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.
7. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time the discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours. The following occurrence(s) must be reported to the Executive Officer within 24 hours:
 - (a) Any bypass from any portion of the treatment facility.
 - (b) Any discharge of treated or untreated wastewater resulting from sewer line breaks, obstruction, surcharge or any other circumstances.
 - (c) Any treatment plant upset which causes the effluent limitations of this Order to be exceeded.
8. The discharger shall submit a facility operations manual within 90 days of the commencement of the discharge.

9. All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:
 - (a) The Report of Waste Discharge shall be signed as follows:
 - (1) For a corporation - by a principal executive officer of at least the level of vice-president.
 - (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
 - (b) All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this provision;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 - (3) The written authorization is submitted to the Executive Officer.
 - (c) Any person signing a document under this Section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting

false information, including the possibility of fine and imprisonment."

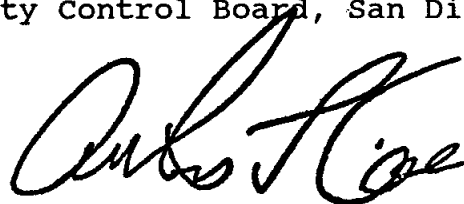
10. The discharger shall submit reports required under this Order, or other information required by the Executive Officer, to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd, Suite B
San Diego, California 92124-1331

F. NOTIFICATIONS

1. California Water Code Section 13263(g) states:
"No discharge of waste into waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights"
2. These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.
3. The California Water Code provides that any person who intentionally or negligently violates any waste discharge requirements issued, reissued, or amended by this Regional Board is subject to a civil monetary remedy of up to 20 dollars per gallon of waste discharged or, if a cleanup and abatement order is issued, up to 15,000 dollars per day of violation or some combination thereof.
4. The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor.
5. This Order becomes effective on the date of adoption by the Regional Board.

I, Arthur L. Coe, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on September 20, 1993.



Arthur L. Coe
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 93-82
FOR THE
BUENA SANITATION DISTRICT
SHADOWRIDGE WATER RECLAMATION PLANT
SAN DIEGO COUNTY

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Executive Officer.
2. Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 5 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
 - (a) "A Guide to Methods and Standards for the Measurement of Water Flow," U. S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
 - (b) "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington D.C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)

- (c) "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-535/5ST.)
 - (d) "NPDES Compliance Sampling Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. Publication MCD-51, 1977, 140 pp. (Available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.)
- 3. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified in this Order.
 - 4. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer.
 - 5. Monitoring results must be reported on discharge monitoring report forms approved by the Executive Officer.
 - 6. If the discharger monitors any pollutants more frequently than required by this Order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
 - 7. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.

8. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurements;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or method used; and
 - (f) The results of such analyses.
9. All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
10. The discharger shall report all instances of noncompliance not reported under Reporting Requirement E.7 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement E.7.
11. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement E.9.
12. A composite sample is defined as a combination of at least eight sample aliquot of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. For volatile pollutants, aliquot must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquot may be collected manually or automatically.
13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
14. Sampling and analysis shall, as a minimum, be conducted in accordance with Article 6 of California Code of Regulations, Title 22, Division 4, Chapter 3 (Reclamation Criteria).

B. EFFLUENT MONITORING

1. The sampling station shall be at the end of the chlorine contact chamber, where the effluent is not diluted by any other waste stream, body of water, or substance.
2. The Buena Sanitation District shall review the Shadowridge Water Reclamation Plant monitoring results for compliance with the following effluent limitations specified in Order No. 93-82 and submit a statement of compliance as part of Monitoring and Reporting Program No. 93-82. The statement of compliance shall identify and report all effluent limitation violations of Discharge Specifications No. B.1. of this Order. The following monitoring program shall constitute the effluent monitoring program for the Shadowridge Water Reclamation Plant specific to this Order:

Monitoring Program				
Determination	Unit	Sample Type	Sampling Frequency	Reporting Frequency
Flowrate	GPD	Continuous	Continuous	Monthly
Biochemical Oxygen Demand (5-day @ 20 C)	mg/l	Composite	3 times/week	Monthly
Total Suspended Solids	mg/l	Composite	3 times/week	Monthly
Volatile Suspended Solids	mg/l	Composite	3 times/week	Monthly
PH		Composite	3 times/week	Monthly
Total Dissolved Solids	mg/l	Composite	Monthly	Monthly
Chloride	mg/l	Composite	Monthly	Monthly
Adjusted Sodium Adsorption ratio		Composite	Monthly	Monthly
Electrical Conductivity	mmho/cm	Composite	Monthly	Monthly
Sulfate	mg/l	Composite	Monthly	Monthly
Iron	mg/l	Composite	Monthly	Monthly
Manganese	mg/l	Composite	Monthly	Monthly
Methylene Blue Active Substances	mg/l	Composite	Monthly	Monthly
Boron	mg/l	Composite	Monthly	Monthly
Fluoride	mg/l	Composite	Annually	Annually
Aluminium	mg/l	Composite	Annually	Annually
Arsenic	mg/l	Composite	Annually	Annually
Barium	mg/l	Composite	Annually	Annually
Cadmium	mg/l	Composite	Annually	Annually
Chromium	mg/l	Composite	Annually	Annually
Copper	mg/l	Composite	Annually	Annually
Lead	mg/l	Composite	Annually	Annually
Zinc	mg/l	Composite	Annually	Annually
Mercury	mg/l	Composite	Annually	Annually
Selenium	mg/l	Composite	Annually	Annually
Silver	mg/l	Composite	Annually	Annually
Coliform	MPN/ 100 ml	Grab	*	Monthly
Turbidity	NTU	Continuous	**	Monthly
Chlorine Residual	mg/l	Continuous	***	Monthly

- * Samples for coliform bacteria shall be collected at least daily and at a time when wastewater characteristics are most demanding on the treatment facilities and disinfection procedures. In addition, one day in each quarter, 5 representative samples (one every 3 hours within a 12 hours period) shall be collected and reported in that quarter.
- ** Turbidity analysis shall be performed by a continuous recording turbidimeter. From the continuous recording turbidimeter, the discharger shall report, on a daily log, whether the estimated average value is above or below 2 NTUs of each day. If the turbidity value exceeds 5 NTUs at any time, its duration shall also be reported on a daily log.
- *** Chlorine residual analysis shall be performed by a continuous recording meter. The average value of each day shall be estimated from the flow chart and shall be reported monthly.

Note: MGD = Million gallons per day
mg/l = milligrams per liter
NTU = Nephelometric Turbidity Units

mmho/cm = inverse of milliohms per centimeter
MPN/100 ml = Most Probable Number per 100 milliliters

3. The monitoring report shall indicate the flowrate and Title 22 levels being achieved in the effluent discharged for land disposal and/or reclamation from the Shadowridge Water Reclamation Plant. Flowrate reported in the monitoring report shall be representative of the flow discharged from the Title 22 treatment facility.

C. POTABLE SUPPLY WATERS

Analysis of the potable waters supplied to the service areas of the wastewater treatment facilities shall be conducted for the following constituent quarterly with the results reported monthly.

CONSTITUENT	UNIT
Total Dissolved Solids	mg/l
Chloride	mg/l
Sulfate	mg/l

D. GROUNDWATER

Representative ground water samples from wells located on the Dawson and the Union Rescue Mission properties, or alternative wells that are located near the irrigation area which have been approved by the Regional Board Executive Officer, shall be collected and analyzed for the following constituents as indicated below. The samples shall be collected semiannually and reported to the Regional Board semiannually.

CONSTITUENT	UNIT
Total Dissolved Solids	mg/l
Chloride	mg/l
Sulfate	mg/l
Manganese	mg/l

E. SEWAGE SOLIDS

A record of the type, quantity, and manner of disposal and/or reuse of solids removed in the course of sewage treatment shall be maintained at the facility and made available to the Regional Board staff.

F. RECLAIMED WATER USERS SUMMARY REPORT

1. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties other than the Carlsbad Municipal Water District or the Vista Irrigation District, the discharger/producer shall submit a quarterly reclaimed water users summary report containing the following information:

- a) Total volume of reclaimed water supplied to all reclaimed water users for each month of the reporting period.
- b) Total number of reclaimed water use sites.
- c) Address of the reclaimed water use site
- d) Basin Plan name and number of hydrologic subarea underlying the reclaimed water use site

2. If the Buena Sanitation District (discharger/producer) is supplying reclaimed water for use by parties other than the Carlsbad Municipal Water District or the Vista Irrigation District, annually the discharger/producer shall submit a reclaimed water users compliance report containing the following information:

a) Reclaimed water use site summary information

The following information shall be submitted for each reclaimed water use site.

- 1) Name of the reclaimed water use site
- 2) Owner of the reclaimed water use facility
- 3) Name of the reclaimed water use supervisor
- 4) Phone number of the reclaimed water use supervisor

Monitoring and Reporting
Program No. 93-82

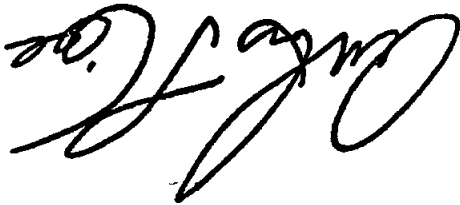
- 8 -

Semiannually	January-June	July 30
	July-December	January 30
Annually	January-December	January 30

Monitoring reports shall be submitted to:

California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd., Suite B
San Diego, CA 92124-1331

Ordered by



Arthur L. Coe
Executive Officer
September 20, 1993

- 5) Mailing address of the reclaimed water use supervisor, if different from site address
- 6) Volume of reclaimed water delivered to the reclaimed water use site on a monthly basis.

b) Reclaimed water use site inspections

Number of reclaimed water use site inspections conducted by discharger/producer staff and identification of sites inspected for the reporting period.

c) Reclaimed water user violations of the discharger/producer's rules and regulations

The discharger/producer shall identify all reclaimed water users known by the discharger/producer to be in violation of the discharger/producer's rules and regulations for reclaimed water users. The report shall include a description of the noncompliance and its cause, including the period of noncompliance, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

G. REPORTING

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

Reporting Frequency	Report Period	Report Due
Monthly	January, February, March, April, May, June, July, August, September, October, November, December	By the 30 th day of the following month
Quarterly	January-March April-June July-September October-December	April 30 July 30 October 30 January 30